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1985 DP BUDGET SURVEY

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FAULT-TOLERANT BLUES

UNDERSTANDING BABBAGE

DATAMATION

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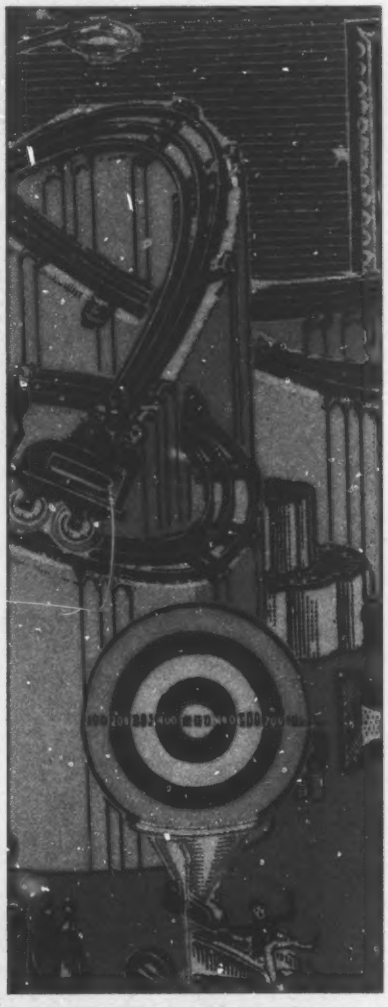

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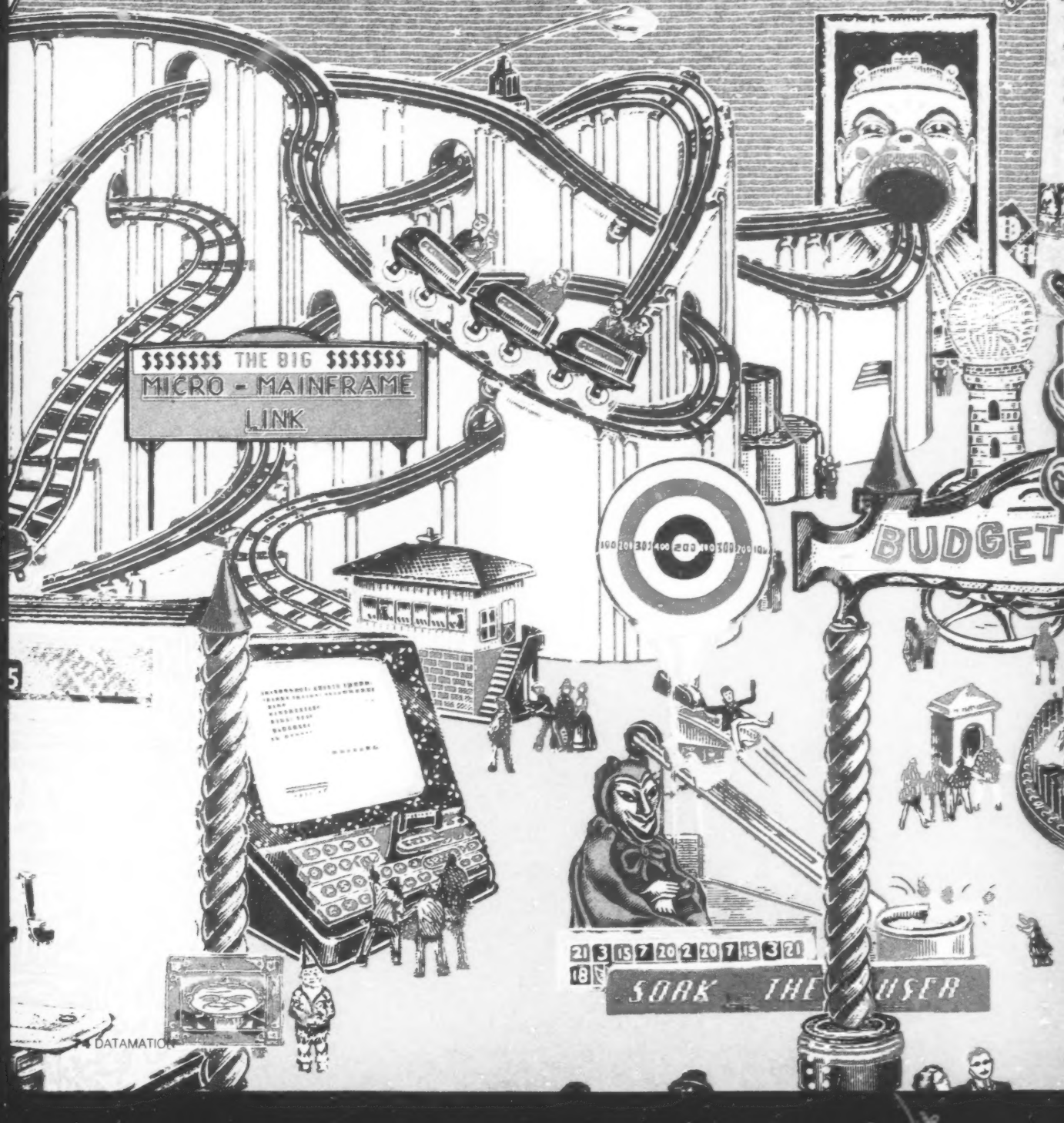
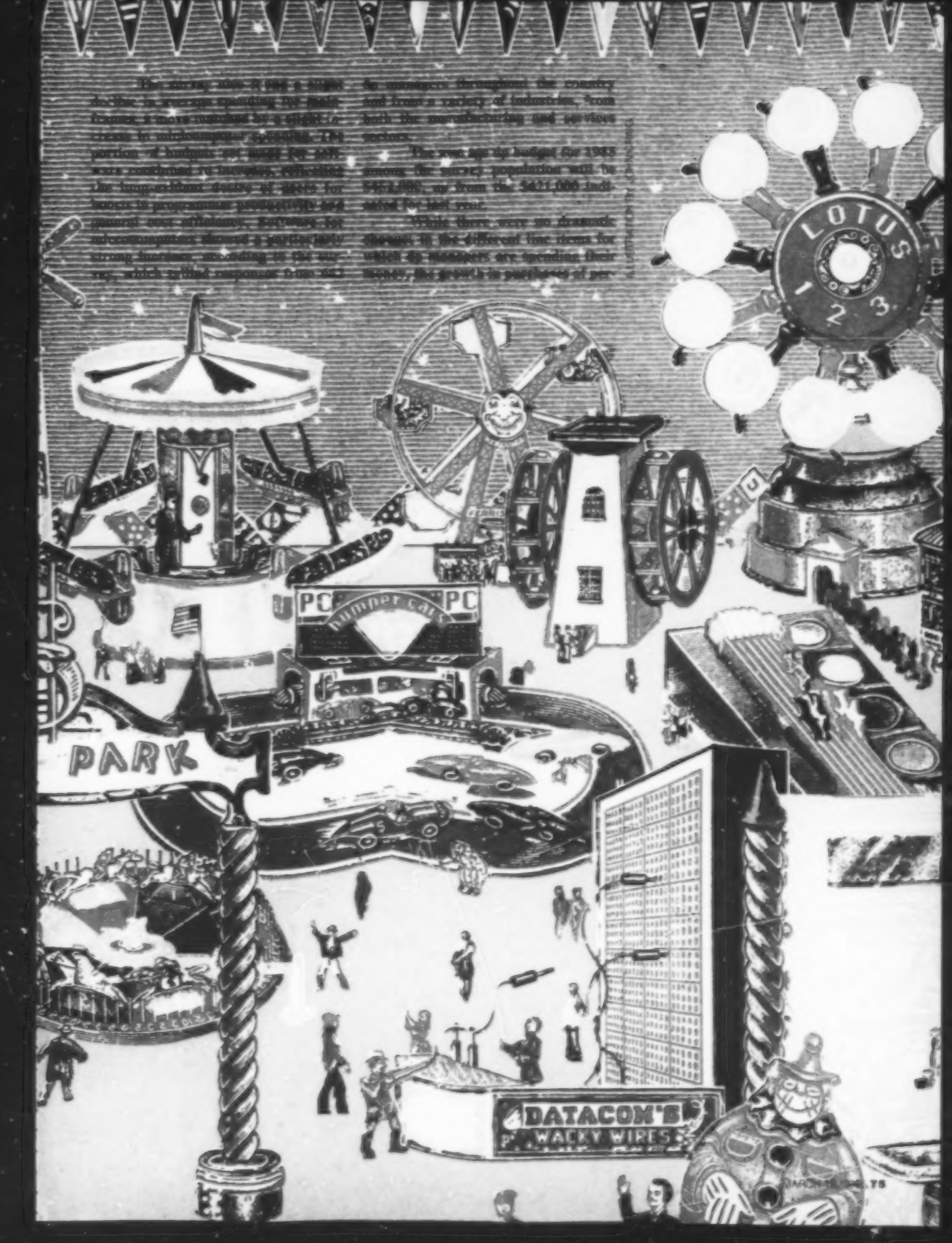
1985 DP BUDGET SURVEY

Market saturation seems to be slowing the pc's roller-coaster ride to success as a major budget line item, according to our survey of dp budget managers.

by John W. Verity

Is the corporate personal computer market slowing down after the past few years of explosive growth? It appears that way, according to a recent DATAMATION survey of data processing budgets at companies across the nation. While dp budgets as a whole will be up in 1985 an average of 7.4% over 1984, the portion of those budgets devoted to pcs has dropped for the first time since the ubiquitous machine entered the market eight years ago.




LOTUS
1 2 3
PC
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DATACOM'S
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"People often ask me how I did my job without a pc and I can't really answer them."

sonal computers does appear to be leveling off, albeit at a substantial and heady level: As some industry analysts have recently claimed, the corporate pc market's explosive growth is tempering this year, primarily because many end users that need pcs already have them, leaving the untapped market smaller than last year's.

"We said, 'Hey, we've got enough [pcs] for now,' " says Bob Cook, controller of Marine Bank Services Corp., Milwaukee, which supplies dp services to Marine Bank. The company has installed about 100 personal computers from IBM and Apple Computer to give desktop computing to end users. "If there's a dire need for another one, we'll get it, but I think things are slowing down."

Cook notes that Marine Services has had an information center offering end-user computing from a mainframe up and running for several years, but the personal computers have not reduced its use very much. Most of the applications brought up on pcs have been new ones, never before performed on computers at the company. "People often ask me how I did my job without a pc and I can't really answer them," he states.

Last year, spending for pcs accounted for 9.6% of the average dp budget at companies of all sizes, but in 1985 it will account for only 8.8%, according to the survey. On the other hand, spending for microcomputer software at sites of all sizes will rise almost 10% to 4.5% of the average total budget. Analysts have suggested that one out of three white-collar workers already has daily access to a pc of some kind; another figure that suggests growth in corporate personal computer installations may be tapering.

Observers had once expected the pc to continue moving into corporations at a rapid clip for several years beyond 1985. It now appears, however, that just as the home pc market may have seen better days, so too is the corporate arena approaching a saturation level. While there is certainly room for more pcs in the office, the huge sales of recent years won't be repeated.

MORE PCS IN FORTUNE COMPANIES

On the other hand a somewhat different pattern can be discerned at large companies—those falling into the Fortune 1,000 industrial or Fortune 400 financial and services rankings—where spending for pcs will actually rise to 3.8% of the total dp budget this year, up almost a fifth from the 3.2% reported for last year. As predicted, these desktop machines are evidently being used to offload many computing tasks from host mainframes and to enable managers, analysts, and others to perform local jobs such as word processing, spreadsheet analysis, and electronic mail.

At American Sterilizer Co., Erie, Pa., pcs will be installed this year to offload end users who have been "going crazy" with VM/CMS-based information center applications, according to John "Jack" Prehoda, assistant vice president of data processing. "The cost many of these people have incurred on the mainframe far exceeds the cost of a pc," Prehoda comments. "We hope to be able to eliminate an IBM 4381 that's now serving our information center's users. Most of them are doing spreadsheet analysis, which calls for high cpu utilization."

He notes that the company will move almost 60 people from the 4381 to pcs in the coming year, while the rest of the almost 500 people using information center applications like PROFS, SAS, and Dynaplan will be moved to a 3033 processor already installed. The survey revealed, however, that most pc users have yet to attach their desktop machines directly to mainframes, despite the widespread availability of so-called micro-to-mainframe links. That market is evidently still in its infancy, despite all the buzzwording that has surrounded it.

One speculative explanation for the apparent leveling of pc budgets is that corporate users are now more interested in pcs that can network directly with mainframes, as opposed to standalone machines. The most appropriate IBM products for that job are the PC/3270 and the PC AT, both of which are experiencing large backlogs and limited production at the company. Some observers suggest that the majority of standard PCs and PC XTs needed by corporate users may already have been installed.

It may also be that the corporate acquisition of pcs is now entered on the books outside the formal dp budget. This year's survey found that on average, Fortune-class companies are spending $128,000 on pcs outside the dp budget and that among all sites surveyed, about $73,000 is being spent that way. Similarly, Fortune companies on average will spend $54,000 for pc software while all the surveyed companies will spend $32,000 on average.

It is perhaps too early to tell if corporate pc installations have actually peaked for good, but—as forecast in last year's DATAMATION budget survey ("The Dp Budget Survey: Pcs Make Waves," April 15, 1984) and Cowen & Co./DATAMATION mini-micro survey ("Upstarts Outshine the Stars," Nov. 15, 1984)—certainly the past year has seen a real surge in their use.

"We've seen an explosion of personal computers," comments Tom Prinz, manager of resource planning and control at First National Bank of Louisville in Kentucky. He notes that the bank has also been expanding its mainframes "quite a bit" with processor upgrades to better handle a fast-expanding communications network and new applications software. Attached to the network are many automatic teller machines and a new administrative network bringing branch offices on-line. Next year, notes Prinz, teller stations may be added to the network.

Although faced with a "very tight budget" this year due to the controversy surrounding the Seabrook nuclear power station, Central Maine Power Co., Augusta, has also found "some cost-effective applications for pcs," according to Willi Hartung, manager of information systems. "We plan to expand their use in 1985," he says.

Mountain Fuel Supply Co., Salt Lake City, installed some 50 personal computers last year and will add another 70 this year, according to John Gogo, cost allocation administrator. Many of the machines are IBM's 3270 PC models, which are being used by systems developers in building programs. Gogo says the small machines have been able to take over substantial compiling tasks from the mainframe. Other pcs are in use for statistical analysis, forecasting, and geophysical computing, he notes, adding that the company has been able to install about 10 IBM PC ATs, despite IBM's inability to fill all orders for the recently introduced machine.

PERSONNEL STILL TOPS LIST

The all-important category of personnel is naturally the far biggest line item in the typical dp budget: this year it is expected that personnel will take 38 cents of every dp dollar, up only slightly from the 37.8 cents indicated for last year's spending. The industry spending the most of its average budget on personnel this year is wholesale/retail distribution, with 48.2%, while the lowest spender in that budget category is transportation, with only 24.2%, according to the survey.

Dp managers said they would have an average of 20.1 people working for them this year, up from 18.5 last year.

The managers are apparently giving their staffs advanced software tools to increase productivity and cut down on staff growth. Spending on systems software is expected to be up, on the average, rising to about 1.5% of the total budget this year from 1.3% last year, the survey indicates.

FIG. 1

THE TYPICAL DP BUDGET

BUDGET ITEM	ALL SITES 1984	ALL SITES 1985	FORTUNE-CLASS SITES 1984	FORTUNE-CLASS SITES 1985
Personnel	37.8%	38%	38.8%	38.1%
Mainframe cpus	7.7	7.5	14.1	13.7
Minicomputers	7.2	7.3	7.7	8.0
Mass storage	2.0	1.8	2.8	2.7
Terminals	2.4	2.7	4.0	4.2
Desktop systems	0.9	0.8	0.6	0.6
Personal computers	9.6	8.8	3.2	3.8
Printers and peripherals	3.6	4.4	2.8	2.9
Consultants	2.2	1.7	1.6	1.5
Outside dp services	3.2	2.7	2.5	2.7
Data communications	2.8	3.1	4.8	4.7
Applications software	2.6	2.5	2.9	2.9
Systems software	1.3	1.5	2.1	2.1
Microcomputer software	4.1	4.5	1.0	1.2
Supplies	7.6	7.9	6.2	6.2
Overhead, rent	4.4	4.0	4.5	4.1

FIG. 2

CHANGES IN DP BUDGETS BY INDUSTRY, 1984 VS 1985

INDUSTRY CATEGORY	
Durable goods mfg.	7.4%
Consumer goods mfg.	6.1
Banking	-1.6
Financial services	5.6
Edp services	12
Transportation	29
Utilities	0
Medical and legal	6.2
Education	2.0
Government	29
Distribution	21.1
Other	5.1
Average	7.4

FIG. 3

ESTIMATED DP SPENDING OUTSIDE OF DP BUDGET (MEAN)

	PC HARD-WARE	PC SOFT-WARE	OTHER HARD-WARE	OTHER SOFT-WARE	PRO-GRAM-MERS	COM-PUTING SERVICES	CON-SUL-TANTS
Fortune Sites	$128,000	54,000	130,000	32,000	107,000	$40,000	47,000
All Sites	$73,000	32,000	69,000	16,000	56,000	$20,000	25,000

"The rise in people cost has been steep," notes Raymond Priore, vice president of systems and information processing at Consolidated Edison of New York, the electric utility. Con Ed's entire dp budget was up a full 30% from last year, due largely to the fact that the company has decided to purchase more of its IBM mainframe equipment rather than lease it. "No doubt software is increasing percentage-wise faster than anything else, but it gives our programmers more bang for the buck."

Priore, like other dp managers, has found systems software packages, fourth generation languages in particular, useful in boosting programmer productivity significantly. "The number of people will still escalate," he adds, "but not as rapidly as before."

Overall, the portion of budgets devoted to hardware—including mainframes, minicomputers, mass storage, terminals, single-function desktop computers, personal computers, printers, and all other peripherals—is seen as remaining at the 33% level from 1984 to 1985. Software's percentage—including systems and applications software for mainframes and minis, consulting services, outside computing services, and all microcomputer software—on the other hand, will probably drop a little, to 12.9% in 1985 from 13.4% in 1984.

In software spending among the Fortune companies, a rise is indicated for this year only for pc packages, to 1.2% of the total budget this year from 1% last year. Spending on software for mainframes and minicomputers will remain level, at 2.9% for applications packages and 2.1% for systems packages, the survey found.

"We've historically bought our software on the outside," commented Bob Cook at Marine Bank Services in Milwaukee. "We rarely do our own."

Probably because of the large amount of batch processing they perform, consumer goods manufacturers and wholesale/retail distributors in the Fortune-class sample showed the highest planned budgets for mainframes, averages of 16% and 17.3%, respectively. Not surprisingly, educational organizations said they would spend only 2.4% of their dp budgets on mainframes this year: schools and universities have been using personal computers lately to provide their students with computer training.

Minicomputer budgets appear to be up slightly, rising to 7.3% from 7.2% of the total budget among the entire survey population, and to 8% from 7.7% among Fortune-class users. Durable goods manufacturers and financial services companies are spending the biggest portions of their budgets on minis, the survey revealed.

Data communications spending evidently will be up this year, but again only slightly. The total sample of respondents said they had used an average of 2.8% of their budgets last year for datacom, although they plan to boost that level to 3.1% in 1985. Among Fortune-class users, however, a slight drop in datacom spending levels is expected, 4.7% in 1985 compared with 4.8% last year. The transportation in-

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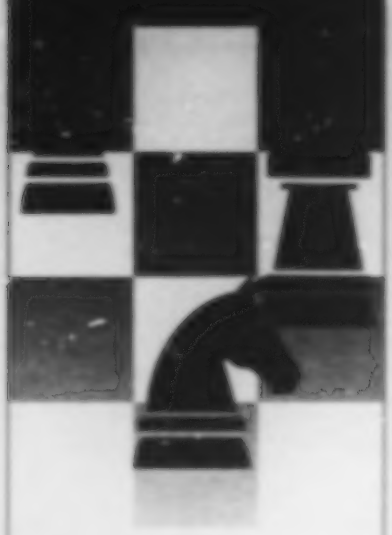

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METHODOLOGY

The 1984 DATAMATION poll was designed to directly reflect the spending patterns of the magazine's circulation base. This year the senior official at each of the Fortune 1,000 industrial firms and Fortune 400 financial and services firms that subscribes to the magazine received the two-page questionnaire. In addition, 3,500 questionnaires were sent to a random sampling of the key official at each site where DATAMATION is received. This combination approximates the population of the circulation base: one third working for Fortune firms, two thirds working for smaller firms and institutions.

Of the 4,900 questionnaires mailed last November, 642 were completed and returned before the mid-December cutoff date; 265 companies from the Fortune 1,000 and 400 groups are included in the database. The 13% response rate is typical for such surveys of DATAMATION readers when no financial incentive is offered.

Of the respondents, 35% are managers of computer operations, 5% are dp staffers, 28% are corporate officials, 8% are in the financial office, 7% are administrative personnel, and 6% are educators and consultants.

By industry, the percentage of respondents by their employers' primary business category are as follows: 25% durable goods, 13% consumer goods, 5% financial services, 12% dp services, 7% educational institutions, 3% government offices, 8% wholesalers and retailers, and 21% miscellaneous. The large majority of the respondents were reporting the budgets for their employers' headquarters dp organizations.

The mean gross 1984 revenue of the respondents was about $200 million in 1984, and the average site's dp spending in 1985 is expected to exceed $452,000, a 7.4% increase over last year. The nominal mean dp expenditure in the most recent survey is not comparable to the prior year's survey owing to different methodology and sampling techniques employed.

Dp spending patterns vary widely, by type of industry as well as size of company. The mean revenue range was from $15 million to $516 million, while the mean dp budget range was $98,000 to $713,000. The 1984 mean annual revenue for the Fortune firms was $426 million and their mean annual dp spending was $752,000, with a range of from $175,000 for a utility to $1 million for the 13 Fortune-sized dp services firms responding to the survey. The Fortune firms responding to the survey indicated an average dp spending increase this year compared to 1984 of 8.3%, slightly larger than the increase expected by the group as a whole.

—Larry Marion

dustry seems to allocate the biggest portion of its average dp budget to datacom while educational users allocate the least.

DATACOM TO GROW SLIGHTLY

"Data communications was responsible for all our growth in most business applications," says Prehoda at American Sterilizer, noting that the company currently has some 650 IBM 3270-type terminals connected from remote sites to the Erie data center's mainframes. Many pcs at the company will be attached to the mainframes as asynchronous and 3270-like devices via software called Tempus, which helps define IBM PC-like diskette files on mainframe disks and enables PC users to manipulate them with standard PC commands.

Asked if they had standardized on particular microcomputer applications software packages, dp managers at all sizes of companies were divided almost fifty-fifty. Of those that had standardized, the most popular package was, not surprisingly, Lotus Development Corp.'s 1-2-3, the integrated spreadsheet program. Among the 49% of large, Fortune-class users that had standardized, just over three quarters had picked Lotus, while among the total sample, closer to one half had picked it.

The organizations most likely to have standardized on micro applications software were found to be consumer goods manufacturers, banks and other financial services organizations, and educational institutions. The least likely were medical and legal services companies.

Lotus 1-2-3 was followed by WordStar and dBase II/III as the most popular pc corporate applications package. Lotus's Symphony package was mentioned as first pick by only 8.8% of all respondents and 12.2% of the Fortune-class respondents.

As for micro-to-mainframe links—software that extracts and downloads host files to pcs—usage was found to be much higher among large users. Of the Fortune-type users, just over two fifths had such software installed, while only 27% of the entire survey population had them running. The most popular link software was that sold by On-Line Software, a GE subsidiary, followed by packages from Cullinet and McCormack & Dodge. ◉

The 1985 DATAMATION budget survey is for sale in report form. It contains 250 pages of statistics and an executive summary prepared by the Market Research Department, covering 642 dp sites in 12 industry categories and including spending priorities for 16 dp budget items. A single copy is $100. For more information, contact Laurie Schnepf, Research Director, Technical Publishing, 875 Third Ave., New York, NY 10022, or call (212) 605-9679.